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VOLUME XXX APRIL, 1931 NUMBER 4

LIFE ADJUSTMENTS IN COOKS HARBOR, NEWFOUNDLAND

ADELPHIA MITCHELL
State Teachers College, Huntsville, Texas

Far away in the extreme northern part of Newfoundland, three miles from Cape Norman lies Cooks Harbor, a tiny isolated hamlet of less than three hundred people.

To the stranger who gets his first view of the cove from a little row boat sent out to the steamer, which anchors some distance away from the gently-sloping shore, the little box-like homes, the seal skins drying in their frames in the sun, the rude stages and flakes, do not present an inviting picture, and only after one has lived for a time among the people and learned to admire their simplicity, their endurance, their kindliness of heart and courageousness of spirit does he begin to appreciate that the settlement is beautiful in spite of its loneliness and desolation.

The inhabitants in this far-away cove have been isolated to a great extent by the treacherous tickles, by the Barrens, a great gray waste of limestone rock which defies use, by their distance from the great trade routes of the world and by their poverty in resources. And even tho many of the fisher-folk bear the old English names of Elliot, Field, Strangemore, Keats, Decker, Hancock, and Allingham, their culture is rather primitive and their customs, their language and their religion reflect the influence of a bleak environment.

HOMES

Their cellarless homes are extremely humble, for in many the lumber has been sawed by hand. One pulls the latch string, walks in unannounced and frequently enters what is the living room, kitchen and dining-room combined. On either side are long settles. In one corner may be the spinning wheel. Near the little wood stove in the center of the room one usually finds a home-made baby

cradle, for in this land of no roads, baby carriages are unknown. On the floor lie hooked mats in unique designs. On the window sills one sometimes sees a carefully watched sunflower or morning glory growing in an old tin can. On the wall is a picture occasion-

FIG. 1. Barren, lonely land with box-like houses perched on rocks

ally, but never a calendar, for in this distant land where the steamer comes only once in two weeks and the mailman creates a sensation in the winter, one needs to know only that the seventh day is the Sabbath Day, and what does the date matter when every day except the seventh is filled with monotonous toil. In some homes a clock is found, but for the most part the people keep "God's time." Outside the door is the barrel in which water is brought from the brooks. On the grounds of the prosperous folk are two sharp-pointed stake enclosures, in one of which dogs are imprisoned at night, and in the other is found a pitiful little garden protected against the encroachments of hungry beasts.

Early in the fall nearly all of the families leave the Harbor, because of its extreme exposure and "shift" to the sheltered Bay where they have homes in which they live during the winter. These houses with their roof covering of turf look bleak and cheerless also.

CLOTHES

The Northern Newfoundlander must be clothed in warm dress to withstand the almost continuous cold. Boots used in the winter are fashioned from seal skin and made laboriously by hand. A

few people keep one or two sheep on a near-by island which the dogs cannot reach. The wool is carded and spun by the women and knitted into stockings, cuffs, a mitten with all the fingers together, and mitts—a kind of mitten with a separate place for the forefinger. Other textiles are obtained from a company store in the harbor, from St. Johns, and from Eatons in Toronto, Canada.

FIG. 2. A grandfather and children

Styles do not change much here, for tariff makes the price of new clothing almost prohibitive. Cotton and wool are laden with 50 per cent duty and ready-made clothing and shoes are dutiable at 65 per cent advalorem.

Dr. Grenfell, who has a Medical Mission at St. Anthony thirty-six miles to the south of the Harbor, has helped conditions somewhat by selling second-hand clothes for reasonable amounts of money.

ACTIVITIES

In the Harbor, rocks and wilderness drive the people to "match their strength against the might of tempestuous waters." With infinite patience, with great ingenuity, and with the simplest of tools they fashion their punts from timber which they have cut in the Bay. (Some one has said, "Show me a man's punt and I'll tell you the manner of man he is.")

From frowning grey dawn until dusk these brawny, dogged men search the sea for the precious fish. They brave the gales which bring death in their train, the sinister fogs which render the inhospitable shores invisible, and the cold which numbs their senses. They go in spite of fatigue, of swollen and festered wrists, to get the fish, for here fish are the "lives o' men." It is a rich experience to go with the fishermen, watch them haul their traps and dip up the shining glistening cod, when they "strike in."

The fish are taken to the stages, where headers and splitters are busily at work. Then follows a quick "mug-up," a lunch of bread and tea, and then a return to hard toil. Later in the season fish are jigged from the shallows.

Another minor activity of the summer is the cutting of the hay. Over in the Bay a few men have small patches of grass which they call hay. It grows pitifully thin, but is regarded as precious. A story is told of one old man who saw a bit of grass floating upon the water. He reached over and painfully drew it in. "'Tis a sinful waste," said he. At Flowers Cove forty miles to the south of the Harbor, some of the fishermen take their schooners and go to Labrador for hay, but in Cooks Harbor none of the people have schooners.

FIG. 3. People are poor, but no word of complaint is heard

In the winter time the men cut wood, which is drawn by the dogs, work at the fish traps, and trap and hunt. Much of the game has been exterminated, however, and frequently the reward of the chase is only rabbits.

Occasionally the men go far into the country, "cook the kettle," in the open when they desire tea, and find shelter in the "tilts"—huts in which a wood supply is kept for those who dare to wander far "on the meshes."

FOOD

Life, however, is a heart-breaking struggle to secure food, which consists for the most part of white bread, pork, molasses, and fish. All kinds of fish are eaten. One kind that appeals to the fancy is the small fish driven by the cod inshore—the capelin. They come by the millions and the women go down to the coast, dip them up by the bucketful and throw them on the beach to dry. "The shortness of the growing season, the scarcity of the soil, the tendency of the people to migrate in summer from sections where the soil is somewhat plentiful to the bleaker coast sections, the sourness of the soil, the poor drainage, the lack of fertilizer except refuse from the fish stages, and the club root disease which attacks cruciferous plants, make it difficult to raise the vegetables so urgently needed

to combat beri-beri and other nutritional diseases." The women do, tho, raise some root crops such as turnips and potatoes, and could raise more, if seeds were obtainable. Occasionally the diet is varied by seal meat, by birds, by blueberries, and by the bake-apple, a tiny berry which ripens in July.

Unlike many coves, where not even goats can live, here a few cows eke out a meager existence. Some families have a few chickens which receive much devoted attention.

Fruit is almost unknown. Oranges on the steamer cost $1.25 a dozen, and few can afford that. An old man was asked if he would like to leave the Coast and the reply came, "I'd like to go

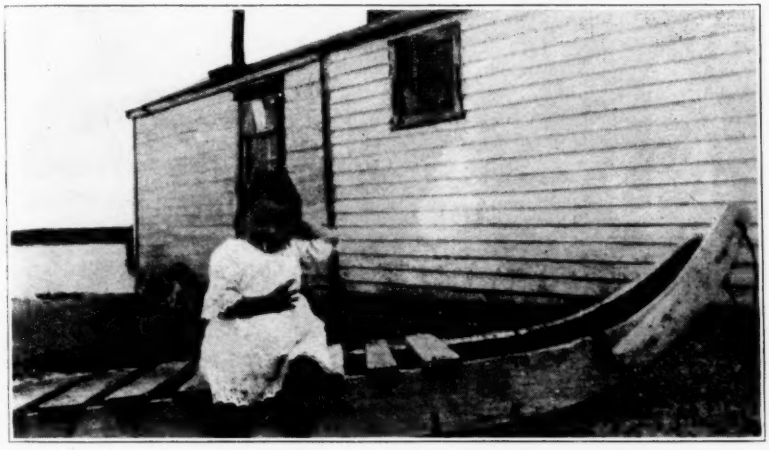

FIG. 4. Komatek to which the dogs are attached

where there are apples." Irvie, a three-year-old, to whom some chocolate candy was given, cried because the dirt came off on his hands. His mother said he was "wunnerful particular."

No description of the food, however, would be complete without mention of the Newfoundlander's national dish, brewis, known as "broose." It consists of hard bread soaked in water until it "plims" or swells. Bread and codfish are boiled together, and over the concoction are chunks of pork and molasses.

Yet in spite of strong and long boiled tea, the lassy loaf, the poor white bread and poorly washed dishes, a strong race has grown up.

COMMUNICATION

Northern Newfoundland is a land without any roads. There are trails, of course. Some one said of them one day, "You'll have

a good path, for you can walk on blackberry bushes all the way." Few of the people have ever seen horses or automobiles. "If they could afford them, there is no where to drive." Except in the winter nearly all communication is by sea. In the winter, however, people go "on dogs" to coves sometimes forty miles away. Every family has from eight to twenty of the dogs—mongrel animals, vicious in the winter because of hunger, but faithful unto death most frequently.

RELIGION

In this land where death lurks so near, God is most real. "Religion becomes both a comfort and relaxation." People listen for

FIG. 5. Flake on which fish are dried and stage in which they are stored

the voice "of the Lord," and are quick to respond. Hell fire means tongues of flame to them. Some of their church meetings are carried on in Salvation Army style. At the "prayers" of the Church of England emotions find relief in song, and so strong is its volume that it can be heard a long way off. At the church and school combined seats are arranged so that the backs may be turned either way. If prayers are held the people face a most humble altar before which a curtain can be drawn. In the homes men often kneel and look toward the Unconquered Sea with which they have to contend.

EDUCATION

Because of lack of contacts a narrow religious spirit has developed, however, and in many places has limited the progress of education. In Cooks Harbor practically all of the people belong to the Church of England so only one school taught by a teacher of that faith is held. Because the people shift their habitations the

teacher's time has to be divided to the children's loss. Yet "larnin" is greatly respected, and he who can read and write well is supposed to be wise in all things. Books are cherished. One old man who was asked what he would like to have replied, "a book, I have only the Bible."

Superstitions

In this country dominated by the elements, the spirits hold forth. Strange lights over the water at night originated in two old people who had died: a woman who married the second time was tormented by the spirit of her first husband and finally had her wedding ring forcibly taken from her finger by the jealous one; a man is queer, it may be, because he is a changeling; a house had to be shifted, because it had been built on a path traversed by an uncle who had died. The stamping and coughing of his spirit grew so fearful, that to give him peace, the home was moved; phantom lights lure ships to destruction, and ghost ships are common. Some of the native therapeutics are odd and interesting. Isolation has forced them to try many things to relieve suffering. For instance, brass chains worn around the wrists will cure "water whelps" or sores caused by salt water, and toothache may be charmed away by visiting seamen. Dr. Grenfell has proved of inestimable service, however, and no longer need people rely on faith cures alone.

Fig. 6. An old man mending his net

Language

Their language is a reflection of isolation. Many of the words are archaic and go back to the time of Chaucer. For example, a child said one day, "Did you bide at home?" They might say of your name, "It is an azy name to mind." Two words which are used frequently are "shockin" and "wunnerful." They might say of a child who had misbehaved, "She is a shockin' maid, wunnerful tormentin'."

Many of the expressions are nautical; a word of greeting may be, "How's 't fish b'y"; a pretty girl is "a trim little craft"; if you go out calling you go on a "cruise"; and if you aren't married, you haven't "let down your anchor."

Amusements

In the winter, when the "fish cannot be danced away," good times are had. At the Christmas season the folks deck themselves out and go mummering from cottage to cottage; they dance the old-time dances with vigor to the music of an accordion; they sit and visit and reminisce by the hour of the "wunnerful hunters" of other days; they discuss politics, wish again for "war" prices on fish, comment on the giving of a Victoria Cross to an ignorant Newfoundland boy; and sometimes they sing the songs which their fathers have taught them.

A Brave and Happy People

What have the cold, the isolation, the barren land, the strenuous labor and malignant sea done to their spirits?

They are the happiest of people—no word of complaint is ever heard; they are among the bravest of people as was shown in the World War, "when the Newfoundland Regiment shared in the General Staffs recommendation that no names be sent in for distinction, as 'where every man was so wonderfully brave, no distinctions should be made and the Regiment—what was left of it—acclaimed as heroes of the Victoria Cross class' "; they are among the most trustworthy of people; they are among the most hospitable; they are among the most appreciative—in all they rank as Vikings not only in body, but in spirit.

VISUAL INSTRUCTION IN TEACHING GEOGRAPHY*

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When we refer to visual aids, we are thinking for the most part of pictures, altho other objective aids might be included. Forty-five years ago the statute that gave New York its start in visual instruction defined visual aids as "pictorial reproductions and graphic representations." It is chiefly in this sense that the term is here used.

VISUAL AIDS AND THE TEACHING PROCESS

Let us proceed at once to consider the relation of visual aids to the teaching process. A picture, as we commonly understand the word, is a representation of some *thing* or a group of *things*. It is the representative character of a picture that determines its true value. The thing under consideration, however remote, can be brought before the learner for examination thru the medium of a picture or pictures. The method of using the picture is essentially the same as that to be followed in studying the thing itself, that is observational, with all that word implies.

We need, however, to have in mind just what aspects of a thing are represented to the eye, the visual avenue of the mind. There are just five classes of facts which it is possible to present visually: size, form, position, color, and motion. The first three of these are always present and are usually of major significance. Whatever the true nature of color may be, it is practically perceived as something objective. Without color or at least color values, the first three classes of facts cannot be recognized. Motion, which is merely a continuous change of position, is the one fact that may be lacking. Size, form, position, color and motion are all objective. Everything else we get from pictures is subjective, that is must be evolved in the mind. It is of the utmost importance that we recognize these truths for they are fundamental to the theory and practice of visual instruction.

By those who are over enthusiastic about visual instruction and would lead us to believe that the use of visual aids to instruction is extremely easy it has been said repeatedly that the eye is like a

* Given before the National Council of Geography Teachers, Clark University, December 26, 1930.

camera. Light from a picture passes thru the lens, is brought to focus on the retina and the pupil immediately has a mental picture. The trouble with this statement is that it is not true. One does not yet have a picture when light has affected the sensitive photographic plate. It is necessary that the exposed plate be developed. The analogy of the camera is not carried far enough. The impression upon the retina, like the photographic plate, must be developed, and this must be done in the mind seated back of the retina. Presentation is necessary to perception, but mental reaction is equally essential. It is quite possible for pupils to look upon a group of pictures posted upon a bulletin board or a succession of pictures thrown upon a screen and fail to gain a single clear mental image. The range of results may extend all the way from this negative one to a full perception of all the pertinent facts presented.

PICTURES

In all uses of visual aids the aim should be to secure correct and definite mental images. Pictures do not say anything. The organ of sight is merely exposed to them. What the teacher and the pupil get from a picture depends upon the previous experience and the thoughtful effort that are brought to bear upon its analysis and interpretation. Furthermore, since every physical picture presents a specific and limited situation, a general notion can be gained thru visual aids only by combining the immediate mental picture acquired with what has gone before. Teaching by visual aids, therefore, is much more a subjective process than it is commonly supposed to be.

Let us, then, dispel from our minds any idea we may have entertained that the use of pictures relieves us of effort and well directed work. It can at best only make work more effective because the pursuit of knowledge proceeds more closely in accordance with the laws of learning.

In the first place the use of visual aids to instruction means at the outset considerable more work for the teacher. She should know thoroly the picture she is to use. She must have made specific and definite observations in determining the significance of the picture for the purposes for which she is to use it with her class. Doing this involves fresh research, often map reading and always a new organization of ideas. Many teachers have reported that they never worked so hard, learned so much and received so much

real satisfaction as when preparing to use screen pictures systematically in teaching geography.

Pupils, too, must give concentrated attention to certain details and relate new acquisitions of information to what they already possess and thus develop understanding.

Merely "showing pictures," whether still or motion, is a relatively unprofitable activity. In order that pictures may really be analyzed and interpreted only a very few of them can be used effectively in one class period.

Further, pictures are to be used chiefly for first presentation, because, before relationships can be recognized and objective facts can be evaluated, the facts themselves must be clearly and accurately perceived.

It may well be pointed out also that the use for pictures should grow constantly less as the student advances in his understanding of a subject. In teaching geography the largest use of them should be made in the beginning grades. Later their use should be confined largely to presenting new objective aspects of the subject.

It is customary for visual instructionists to decry language expression. But nothing can take the place of language. Pictures may be used very effectively to give meaning to language symbols. It is essential that from the outset we use geographic terminology and develop as soon as possible adequate language for expressing geographic thought relations.

The teacher who confines her class exercise to loose talking about pictures or who allows her pupils to do so makes a grave mistake. She needs to determine with as much certainty as possible the extent to which pupils are gaining clear ideas of the objective facts pertinent to the immediate problem. Pupils should spell all geographic terms. They should express many of their ideas by rapidly made sketches on the board and on paper. The teacher should point the way. Orderly analyses of facts learned should be written out. In order to carry out such a program, it is quite essential that the use that is made of screen pictures should take place in the regular classroom rather than in a special lantern room, in order that the blackboard, writing material and textbooks may be at hand and used readily. Pictures often have large value in motivating further study. Their use should be accompanied or followed by topical reading.

The classes of facts to be perceived in pictures have already

been enumerated. Size, or quantity, is an aspect of every thing we are to know: the tree in the forest, the amount of wheat produced on an acre of land or in a country, the height of a mountain, the amount of heat at a certain place at a given time. Of course to measure these things certain standard units need to be used. But, further, the pupil needs to make the measurements by comparing with certain practical quantitative concepts that have grown out of his experience. The habit of measuring needs to be acquired and established. The use of pictures offers a wide range of opportunities for doing this.

MAPS

Likewise, position is a primary objective factor. What is represented in a picture usually needs to be definitely oriented with respect to the whole of which it is a part. One is often unable to determine position from the picture itself, for example, the latitude of certain selected places, the altitude of certain mountains and bodies of water, and distance from sources of raw materials to markets. The thing to be visualized, however, can be located on a map. To do this should also become the habit of both teacher and pupil. Each particular scene should be built into the region to which it belongs. Maps are among the most essential of visual aids in learning geography.

Textbooks are generally well supplied with maps, but most of these maps are still cluttered with too many place names. There is, of course, some warrant for a fairly large number of names on textbook maps, for these maps are used to some extent for reference by pupils individually. It would, however, seem to be better to accustom pupils to go to an atlas for names that are met infrequently.

There is even less justification for many names on wall maps, which should be used primarily for class instruction and therefore should carry only the general and basal facts to be taught the class as a whole. It seems obvious that wall maps should be legible at classroom distances. Some advantages would be gained if nearly all names were omitted from wall maps. Such maps might well be used to test the pupil's knowledge, rather than to give him information. If the pupil cannot name a city or river represented by proper symbol, he has the aid he needs in his textbook maps and should get it there.

The making of wall maps might be improved in other ways. On

nearly all maps now available degree numbers for latitude and longitude, which appear on the margin, are much too small and might easily be made larger without interfering with anything else on the map. The legends are almost always smaller than they should be and this condition is inexcusable. Map makers have certain long established standards from which they will not depart until a positive demand for a change comes from teachers.

Publishers claim that most of the maps purchased by schools thruout this country are still political in type. It would seem that those who select maps must be out of touch with the present tendencies in geography teaching, for certainly physical-political maps represent much more completely the geographic facts upon which stress is now being laid. By a physical-political map is meant one on which the broad physical features predominate and political boundaries are represented in a subordinate way.

The prediction is ventured that there will be a very large increase in the number of map slides that are used in our schools. A standard set of about eight wall maps, the world, the continents, and the local state, is obviously inadequate for the needs of geography. A half dozen additional maps of rainfall, products, population and the like, all much too small, does not help much. Map slides representing small areas and a wide range of geographic phenomena can be made, require little storage room and are readily used. These can be projected to the size necessary to render every detail clearly legible across the standard classroom. The New York State Education Department has already produced several hundred such slides and is constantly adding others.

For certain purposes the globe map is the most suitable one for the earlier stages of geography teaching. The globe has long been a standard piece of school equipment. It is well known how little the globe is used in most schools. It has been generally assumed that the chief service of the globe lies in teaching mathematical geography. In New York State at this time a project in the use of the globe is being worked out in the fourth grade for teaching the size, shape and position of the large land masses and water bodies and the reading of directions. A series of exercises has been prepared which each pupil is to perform individually. The aim is to determine in this way whether it is possible to avoid some of the erroneous ideas pupils have been gaining from the exclusive use of flat maps.

To return to the matter of pictures I would point out that for class instruction the only form suitable and at the same time practicable is the screen picture. Particularly by means of the glass slide it is possible to secure both the quality and the size necessary for satisfactory results. If any pupil cannot recognize the particular feature of a picture that is under consideration by the class, he is deprived of the benefits of the exercise. To be read, the picture must be of sufficient size. In most cases good quality also is essential to clearness.

Loose prints have their place, but they are for individual study. Much time and energy are doubtless wasted in our schools in the use of prints. What possible good can come from the holding of a 5 x 7 print before a class of 30 or 40 pupils? The geography workbook of a seventh grade pupil who was studying Italy, recently examined, contained 7 or 8 pictures which the pupil had collected and pasted in it. Not a single one of the pictures represented any real geography of that country. This pupil evidently had no understanding of the proper standards for the selection of pictures for geography. Besides, too much time had been consumed in mechanical operations. How much understanding of the basis of visual instruction does a teacher exhibit when she loads all her bulletin boards and blackboard mouldings with a miscellaneous collection of pictures and leaves them there for weeks at a time?

Visual instruction to be successful in a school should receive official financial support and it should be supervised.

THE "WHY" OF SPOKANE

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This study of our home city fits into our curriculum following a study of the United States, which comes in the fifth grade.

I. The objectives are as follows.
   A. To help the class discover how the chief economic industries of the city of Spokane are related to the immediate site on which it is built
   B. To find out what the people of the "Inland Empire" are doing and "why" they are doing it in terms of their natural environment
   C. To see how the development of the city of Spokane is related to the development of the "Inland Empire" and the United States as a whole
   D. To promote in children a civic pride and a consciousness of the need of a wise use of the resources of the "Inland Empire"

II. Materials upon which the class work was based
   A. Pictures
      a. Airplane photo of Spokane, 1930
      b. Picture of Riverside Avenue in 1891
         The Review Building and Exchange National Bank are familiar landmarks. The three intervening blocks are occupied by one story frame structures.
      c. Pictures showing *natural* landscape
         1. Rolling hills of "Palouse," bare and brown as they appear in early spring
         2. Priest Lake and forest-clad hills
         3. Road between Spokane and Twin Lakes, showing evergreen forest
      d. Pictures showing *cultural* landscape
         1. Wheat harvest
         2. Grain elevators along railroad
         3. Others illustrating what the people are doing
   B. Maps
      a. Map of Pacific Northwest, showing Spokane and principal towns of the "Inland Empire"; also roads and railroads

b. Physical maps of state in
1. Atwood: New Geography Supplement, p. 2.
2. Barrows-Parker: United States and Canada, p. 31
c. Rainfall maps of United States
1. Barrows-Parker: United States and Canada, p. 36
2. Atwood: New Geography, p. 82

C. Texts
a. Atwood: New Geography, pictures, pp. 70-82, Washington supplement
b. Barrows-Parker: United States and Canada, pp. 30-35; 38-41; 43-47; 48-51; 57-58; 59-63; 66-68; 69-71
c. McMurry-Parkins: Elementary Geography, pp. 127-131; 135-138
d. J. Russell Smith: Human Geography I, p. 106-107

D. Other illustrative materials
a. Samples of ores
1. Gold and silver
2. Copper
3. Lead
b. Booklets, pictures and maps supplied by the Spokane Chamber of Commerce

III. Time allotment

Ten half-hour class periods were devoted to the study of Spokane. The first two lessons introduced the problem thru the interpretation of pictures showing Spokane as it is now and was in the past, and the reading of maps illustrating various natural and cultural features of the landscape. The next six lessons used the "journey method" to motivate a geographic interpretation of the outstanding economic development of various specific parts of the Inland Empire and their relationships to Spokane. In the concluding lessons the study was tied up with similar developments in Washington and the United States as a whole, ending in a check on the whole unit.

IV. Procedure

A. Show picture of Spokane taken from airplane

If you were high up in an airplane this is what you would see when you looked down upon Spokane. The top of the picture is East; North is at the left, etc. Notice how small even the high buildings appear and the people cannot be seen at all. Find a river. What is it? In what

direction does it flow? Find the Northern Pacific and the Chicago, Milwaukee & St. Paul railroads. In what direction do they cross the city? Does the map on page 2 of the Washington Supplement in Atwood's New Geography suggest a reason for this location of the railroads? Do you see that the railroads follow the Spokane River thru the rugged mountains from the east? Do you find another

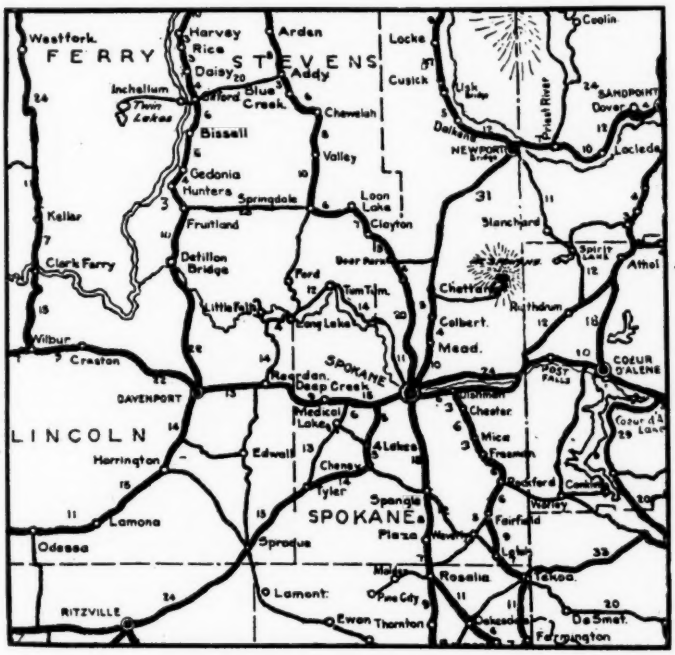

FIG. 1. Map of Spokane Area

place where railroads could cross the mountains easily? What natural and cultural features can you recognize in the picture? (river, falls, Monroe Street bridge, Davenport Hotel, Review Building, Old National Bank, Paulsen Building, Exchange National Bank, Chicago, Milwaukee and St. Paul Depot, Washington Water Power Building, Sperry Flour Mill, Armour Packing Plant, etc.) Where are the power plants, lumber and flour mills located with reference to the river? (along banks of river and close to railroad) Is that what you would expect to find? Why? Some of the first settlers bought land on the north side of the river and started a flour mill. The falls furnished power to run the

machinery and soon other mills were established. Last year when we read about Holland in "Journeys in Distant Lands," we found that the sea was in some ways a friend to the Dutch people but in one way it was an enemy. Can you see how this might be said of the Spokane River? Judging from the picture, where is the business section located? (largely between river and railroad) Can you see a reason for this? Our picture shows a part of one of the chief residence sections. Where is it? Why do you suppose this part of the city was selected for homes? (land less valuable, cleaner, beautiful view of city and surrounding country, etc.) If our picture extended farther north, we would find another and somewhat newer residence district located on North Hill, directly across the city.

B. Show picture II (not included in article)

This picture was taken in 1891. Why was it not taken from the air? Only two old landmarks remain, the Review Building and Exchange National Bank. All one story frame buildings have long since disappeared. Why? In comparing the 1930 and 1891 pictures, the children should be led to see that the marshy land between Maine Avenue and the river existing in 1891 has become a filled-in built up landscape. If the comparisons are directed properly the children should be led to see the following changes.

1891	1930
a. No transcontinental railroad	a. Several transcontinental and many local railroads
b. Narrow wooden bridge at Monroe street	b. Well built bridge of steel and concrete
c. Few frame buildings	c. Modern skyscrapers of steel and concrete.
d. Blacksmith shop	d. Nine bridges
e. One bridge across river	

Why do you suppose these changes were made?

C. Stating the problem

How many of you have driven to Cheney? It is a small town, yet when this picture was taken, in 1891, the Court House was at Cheney, the Northern Pacific railroad passed thru Cheney and many people thought Cheney would become a big city and Spokane would always remain a small

town. This did not prove to be true. *Why has Spokane become a comparatively large city?* We have already noted some of the advantages for city building afforded by the site of Spokane. Let us find out what the people are doing in the country nearby and see if that will help us answer the question. Find Whitman County on the map of Washington. On the map of the Inland Empire, trace our journey with red crayon.

D. "Journeys" into the surrounding country to learn what

FIG 2. Airplane View of Spokane

the people are doing and why. (Not all are included in article.)

a. Our first trip will be by auto down the "Palouse" highway. On this large map of the Inland Empire, find the road from Spokane to Colfax. In which direction are we traveling? What we see as we drive along will depend somewhat upon the season of the year. If it happens to be during July, August, or the first part of September the landscape will be very much like this.

(Show picture of wheat harvest; grain elevators.)

On page 145, Book II, McMurry-Parkins, examine the picture of a wheat field. How does this field differ from

those of the "Palouse"? Which is easier to farm? Then why do you suppose most of the people in the country south of Spokane are using their land in this way? (Read page 8 in Washington Supplement to see if you were right. Also examine pictures showing plowing, harrowing, seeding, etc.)

All this time we have been on a paved road; now we have a few miles of unpaved road before reaching Colfax. Notice the thick dust. It has not rained for many weeks. The rainfall map will show you how little rain falls in this part of the state. (p. 8 Suppl.)

If you lived here, you would have a longer vacation. During early September, the trucks are busy hauling the wheat to the elevators. This makes the roads still dustier and schools do not open until the wheat hauling is about completed. As you noticed in the picture, the grain elevators are built along the railroad. Why? Where will the wheat from these elevators go? Can you suggest two reasons why flour is made in Spokane?

Whitman County is the fourth wealthiest county in the United States (1920). For what must the people spend some of their money? Where will they buy some of these things? How does that help Spokane?

b. Our next journey is to Newport, about 50 miles north and a little east.

(Show picture of evergreen forest.)

This landscape is very unlike that of the "Palouse" country. How many differences can you discover? What is one kind of work we might find the people carrying on here? Look at figures 30 and 31 in "United States and Canada" to see if you are right. On our way we pass thru the lumber towns, Camden and Scotia. The largest saw mill is at Newport, on the Pend Oreille River. There the men work on day and night shifts nearly all year. Are there some questions you would like to ask?

Those hills covered with young trees have been set out by the government to take the place of the trees burned by forest fires. Much of the land that has been burned over will be reforested. What can we do to help conserve the forests?

The lumber company owning this mill has a ninety-nine-year lease. Why do you think it is such a long lease? All the large trees nearby have been cut. The lumber camp is now twelve miles away, in the Selkirk mountains in Idaho. We are much higher here than at Newport. What do you think the chute is used for? Many logs are tied together and floated down the river. Do you see a reason for having the mill on a river? In winter the company's teams are kept busy hauling the logs to the mill. Why is the winter a busy hauling season?

This next picture was taken as the flat cars were loaded with the huge logs and ready to start. This is white pine and some of it may be bound for the Ohio or Diamond Match factories in the valley just east of Spokane. Trace the railroad route on the map.

There are many lumber camps in the mountains north and east of Spokane. Where would most of the logs be sent? Can you name something besides flour that people are manufacturing in Spokane?

c. Today we will visit the mines at Chewelah, Valley and Republic.

Examine specimens of gold, silver, and copper ore.

This time we will go almost directly north of Chewelah. Republic, as you see on the map, is north and west of Chewelah. The country is sparsely settled and to reach Republic one must first cross the Canadian border. The scenery is similar to that between Spokane and Newport.

Had we gone east instead of north we would have reached the Coeur d'Alene mines famous for lead and silver. All these metals must be separated from the rock. Some of the smelting is done near Spokane. Why?

Many Spokane people have money invested in these mines and a large part of the money they make is spent in the city. You all know of the Hutton Building and the Paulsen Building. These two men, Mr. Hutton and Mr. August Paulsen, made their money in the Coeur d'Alene mines.

d. Now let us start out to the west, along the Sunset Boulevard. Why do you think it was given that name?

Of which trip are you reminded? How do these farms compare with the others? (Examine pictures.)

This region is sometimes called the "Big Bend." Look at the map to see why it should be so called. What are the farmers raising? Can you think of a good reason for raising cattle and hogs and growing alfalfa as well as wheat? The soil here is not so fertile. These people were probably late comers and found all the best land taken. Where will these people market their cattle and wheat and other farm products? What will they do with some of their money?

e. Five or six miles east of Spokane we will see farms of still another kind. List as many ways as you can in which these farms differ from those in the "Palouse" country; from those in "Big Bend." Between the rows of apple and pear trees, what do you see? Strawberries and many kinds of vegetables are produced. For several years, while the young trees are growing, the farmer makes his living from the vegetables and berries. Where does he sell them?

This next picture shows an apple packing plant. From here many boxes are sent all over the country. Some go to New York and are shipped to England. Washington is one of the leading states in apples as well as in lumber. How do the fruit growers of this valley help Spokane?

f. Which of the places we have seen would you select for a summer home?

All around Spokane are beautiful lakes. Some, including Spirit Lake and Twin Lakes, which we passed on our way to Newport, are well known summer resorts. This one, Priest Lake, is in the midst of the forests. Hundreds of tourists from the East visit these lakes each year. They have to come to Spokane first. Do they buy anything while here? What does their coming mean to the city?

E. Map study to explain location of railroads

We have taken these journeys by auto. How else might we have gone? Several railroads pass thru Spokane on

their way to the coast. Looking at the physical map, you can see that they follow the Spokane River, coming in from the east. For some distance north and south, this is the only route across the mountains.

Notice that Spokane is in a sort of pocket, or basin, with a rim of mountains on three sides. On which side are there none? Do you see why all the railroads leave Spokane by the Latah Creek Valley?

F. "Tying up" with the rest of the United States

When we drove to Colfax we found most of the people making their living by raising wheat. In what other parts of the United States was that true? In what ways are these places alike? How do they differ?

Northeast of Spokane where there are dense evergreen forests, many people are engaged in the lumber industry. Where else do we find the people lumbering? Compare the way the logging is carried on in the New England States, the North Central States and the Southern States with the way it is done here. Explain why they are similar or dissimilar.

In Chewelah we found men mining copper: at Republic, gold and silver; in the Coeur d'Alenes, lead and zinc. Where also in the United States is each of these found?

You remember that in the "Big Bend," where there is less than 20 inches of rainfall, the people do not depend upon the wheat crop alone but are engaged in diversified farming. Where else in our country are the people producing several kinds of crops? Is the reason the same?

A few miles east of Spokane we were in the midst of an irrigated fruit district. What other places do you know where it is necessary for the farmers, or fruit growers to irrigate?

G. Summary

Are you ready now to make a list of some of the reasons which help explain the "why" of Spokane? These reasons center about these facts.

a. This location is a natural railroad center.
b. The falls of the Spokane River furnish power for heat, light and manufacturing.

c. The surrounding "Inland Empire" is one of the richest regions in the country, supplying an abundance of raw materials.
   1. One-tenth of the wheat produced in the United States comes from the "Inland Empire."
   2. The largest forest of white pine in the world is near Spokane.
   3. Forty per cent of the country's lead is from the two hundred mines of the "Inland Empire."
   4. Thirty-seven million pounds of wool is produced annually.
   5. Much fruit is grown in the Spokane Valley.
   6. Dairying, meat packing and poultry raising are growing industries.
   7. Paper and cement are important manufactures, as are flour and lumber.

d. The scenery is unsurpassed and many tourists are cared for each year.

e. The climate is pleasant all year.

f. The water supply is from mountain streams and is excellent.

You may copy this paragraph in your geography note books.

In the present site of Spokane the early settlers recognized a natural railroad center. The falls of the Spokane river furnish power to manufacture the wheat, lumber, and other raw materials from the surrounding country. The attractive scenery, healthful climate and many different ways of earning a living, have all helped to make Spokane a growing and prosperous city.

GEOGRAPHIC NUGGETS IN PUBLIC DOCUMENTS

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The products of commercial publishers, being well advertised, attractive in appearance, and interestingly titled, as a rule, receive more attention than the more modest public documents. The prosaic titles, plain covers and lack of advertising blurbs should not discourage the teacher from investigating the latter, for they often contain material far superior to the average travel book and invariably cost less.

The purpose of this article is not to list all the useful material purchasable from government offices, but rather to present a fair sample of the wealth of source material available and to indicate how it may be obtained. In an attempt to "kill two birds with one stone" the publications discussed have been so selected that a complete set of them provides an excellent geographic reference library, including some material on almost every important geographic region of the world.

Before we start our literary exploration, it may be well to warn the uninitiated that the geographic nuggets in these documents are usually mixed with heaps of (for our purpose) unimportant details and uninterpreted statistics. It will be found helpful to make a special table of contents, listing only the geographically important sections, so as to facilitate future reference.

GENERAL PUBLICATIONS

These are so well known that to mention them will suffice: *Commerce Yearbook,* Vol. I, U.S. ($1-USG) (1), Vol. II, Foreign Countries,* ($1-USG) (2); *Yearbook of Agriculture* ($1.50 USG) (3); *Geography of the World's Agriculture** ($1-USG), *Commercial Atlas of World Geology, Part I* (out of print, but in most libraries). The *Handbook to the Ethnographical Collections of the British Museum** (2s.6d.-import thru bookseller) gives a good survey of the non-European civilizations with abundant illustrations. For those who wish to keep informed on changes in world trade, the weekly, *Commerce Reports,* (10¢ per copy, $4 annually, USG) will

NOTE: See last page for meaning of abbreviations.

furnish this information as well as occasional descriptions of industries.

UNITED STATES

A Graphic Summary of American Agriculture, (20¢ USG)* provides a good starting point, and may be supplemented by countless pamphlets dealing with specific regions or industries, for example: *Forest and Range Resources of Utah* (30¢ USG), *Sugar* (20¢ USG), *Sheep Industry* (15¢ USG), and numerous state publications (mostly free). It is impossible to review the numerous state publications but the following hints may help to locate them. One of the best ways to become acquainted with state materials is to visit the library of some agricultural college or similar institution and look over the recent numbers of circulars, bulletins and reports of whatever states especially interest you. Most of this material is technical, but enough studies of typical areas and crops will be found to make the visit well worth while.

Many states and counties have resort areas about which they publish illustrated pamphlets. Such material may be located by reading the travel advertising sections of magazines or by consulting tourist agencies and automobile associations. If you are interested in particular areas, write to the Chamber of Commerce of the principal city in that area, and usually literature and a courteous reply will be forthcoming.

CANADA

The *Canada Yearbook* (in many libraries) gives a fairly complete description and statistical summary of current Canadian affairs, but the more condensed *Handbook of Canada* (25¢) (4) will suffice for all but the specialist. Further information can be obtained from the National Development Bureau, Ottawa, which answers inquiries or refers them to the proper department. This bureau has recently issued an excellent *Natural Resources Map of Canada** (free on request) while road maps containing some economic information have been issued by several of the provinces. Most of the provincial governments maintain tourist bureaus which are quite generous in distributing maps and illustrated literature of educational value.

ESKIMOS AND INDIANS

A small pamphlet, *Sanitary Conditions Among the Eskimos,** (10¢ USG) gives an excellent summary of Alaskan Eskimo life as

altered by contact with white civilization. The almost unaltered Eskimo culture is described in *The Life of the Copper Eskimo* ($1. Dept. of Marine and Fisheries, Ottawa). The various Indian tribes have been studied by our Bureau of Ethnology, and by museums. To most teachers the most interesting of these studies is Bulletin 86, *Chippewa Customs* ($1.60 USG) which describes the same kind of life as is pictured in Longfellow's Hiawatha. Contrasting types of Indian life are described in the profusely illustrated handbooks of the American Museum of Natural History, New York City: *Indians of the Northwest Coast* (fishing type), *Indians of the Plains* (buffalo type), *Indians of the Southwest** (irrigation, seed gathering, hunting types) (75¢ each).

LATIN AMERICA

Our southern neighbors are described interestingly in the publications of the Pan-American Union, Washington, D.C. For those who like to take imaginary trips with their classes *Seeing the Latin Republics of North America** (25¢), *Seeing South America** (25¢) and *Ports and Harbors of South America* (25¢) will furnish the desired background. If more statistical and commercial information is wanted, the Union's booklets (5¢ each) on the various commodities, nations and cities of Latin America, are short and to the point.

Detailed regional material is also available. One might start by examining *The Virgin Islands of the U. S., a General Report by the Governor, 1928* (25¢ USG), which tells almost everything about our newest possession, including a three page account of the pirate, Blackbeard.

A good introduction to tropical agriculture can be obtained from the publications of the Empire Marketing Board. *Tropical Agricultural Research in the Empire** (1s.6d BLI) (5) provides a good discussion of cacao, sugar cane, cotton and the most important palms. Further material, limited to specific regions will be found in *Reports on the Development of Agriculture in Certain Colonies: British Guiana** (9d. BLI); *Leeward and Windward Islands and Barbados* (6d. BLI).

The Indians of the tropical forests of South America have, roughly speaking, a uniform culture. A very detailed account of this culture is given in the beautifully illustrated 38th Annual Report of the Bureau of Ethnology, *The Guiana Indians* ($3 USG).

Even a hurried examination of this book will dispel the common idea that Indian life is simple. The same region may be studied from the point of view of white exploitation in *Rubber Production in the Amazon Valley* (65¢ USG).

The agricultural economy of temperate South America has been authoritatively treated in two booklets: *The Coffee Industry of Brazil** (20¢ USG) and *Argentine and Paraguay,* Dept. of Agriculture Bulletin 1409 (20¢ USG). To get a balanced picture of the economic situation of these countries the accounts in *Commerce Yearbook,* Vol. II should be examined.

Paraguay and that part of South America to the northwest of it, are inhabited by people of Indian ancestry with more or less Spanish blood. The results of this mixture are described in *Paraguay, A Commercial Handbook** (40¢ USG) in what may be taken as a sample of the good material in these handbooks:

p. 25. The majority of the people of the Paraguayan nation are the result of the mixture of the Spanish conquerors with the Guarani aborigines of the region. Guarani, in fact, remains the common language of the people. . . . The more progressive part of the population is trying to discourage its use, and it is prohibited in the schools, but in spite of prohibitions it persists as the language of ordinary intercourse and is even spoken within the precincts of the National University.

p. 26. The possession of a small patch of mandioca and maize, a few orange trees and some chickens insures their owner against starvation. Although there is much poverty, that, in view of the small cost of subsistence, has none of the terrors of the same condition in the large cities.

The same author, W. L. Schurz, has written *Bolivia, a Commercial and Industrial Handbook* (65¢ USG). By studying these two books together, an interesting comparison may be made between life in the hot lowlands and on the cold plateau. Similar handbooks have been issued on Peru ($1.25 USG), Colombia (out of print) and Venezuela (out of print). All of these handbooks contain material on physiography, history, industries, trade and social conditions but the economic conditions are most emphasized.

EUROPE

Industrial and Commercial Handbooks have also been published for these European countries: United Kingdom ($1.75 USG); Switzerland (40¢ USG); Norway* (10¢ USG); Rumania (65¢ USG); Yugoslavia (85¢ USG) and Turkey (out of print). Such

sections as this from the Yugoslavia Handbook make the series more than a set of statistical manuals:

p. 30. the farms are invariably small, averaging less than 20 acres, and are cultivated by the proprietors and their families, who live for the most part from the produce of their lands. Even the material for their clothing is in the major part home-woven. Their consumption of store goods is small, and practically the only imported articles consumed by them are cotton goods, sugar, rice, coffee and kerosene. Their houses are usually of one story, of brick and stucco construction, and simply furnished. Their farming stock, as a rule, consists of a horse or two, two oxen, a cow, and a small number of pigs, sheep, goats and fowl. Their farm equipment comprises a small plough and such simple implements as spades, hoes and rakes.

Further information on Balkan peasant life will be found in *Dept. of Agriculture Technical Bulletin* 126* (30¢ USG), which contains an especially good discussion of the Rumanian peasantry.

Other pamphlets of special value on Europe are *Agricultural Cooperation in Denmark* (15¢ USG), *Finland, Economic Review* (10¢ USG), *Baltic States, Short Review of Resources, etc.* (10¢ USG), *French Iron and Steel Industry* (10¢ USG), *Swedish Forests, Lumber Industry,* etc. (75¢ USG).

Since the War European nations have been encouraging the American tourist by distributing hundreds of thousands of gayly illustrated pamphlets. These may be obtained gratis by answering some of the travel advertisements which appear every spring in the higher class magazines. Much of this literature has little educational value except for its pictures which may be used for scrap books and classroom exhibits.

AFRICA

The most ambitious of all the yearbooks is *The Official Yearbook of the Union of South Africa* (5s.) (6) with its 1,200 pages containing hundreds of statistical tables and numerous maps and grafs, also a bibliography of South Africa. Description is not altogether lacking, altho it tends to be technical and statistical, as in this extract:

p. 517. Much the most important development since the original opening of the mines of the Kimberly group has been the discovery . . . of the great Premier mine, which lies about twenty miles east-north-east of Pretoria. The pipe is roughly an oval, 2,900 feet long by 1,500 feet across, giving an area of nearly 80 acres, or 3,570 claims. The enormous surface extension thus represented, as compared with other pipes, will be realized from the consideration that it amounts to only a hundred claims less than that

of the three largest mines of the Kimberly group together. . . . . This mine is at present working a day and a night shift of 60 hours per week each. The number of employees is 519 Europeans and 5,800 natives.

During the War the British Admiralty issued a series of excellent handbooks, most of which are unfortunately out of print. These blue-covered books contain details as to topography, plants, animals, peoples, industries etc. of strategic regions, and since this material is nowhere else assembled in such convenient form, they are well worth looking up in the libraries (*Handbook of Belgian Congo, Arabia etc.*).

A series of smaller handbooks, known as the *Peace Handbooks* (BLI) are reprints of material prepared for the use of the British delegates at the Peace Conference. They contain brief summaries of the physical and political geography, history, and social, political and economic conditions of most of Africa, and altho the information contained in them is mostly *ante-bellum*, it is still correct as a whole with the exception of certain sections on economic conditions. The handbooks on Angola (2s. 6d. BLI), Belgian Congo* (3s.) and Mozambique (2s. 6d.) give a good cross-section of Central Africa.

The American government has published a number of pamphlets on northern and western Africa, of which: *Cocoa in West Africa** (15¢ USG), *Rubber Production in Africa* (25¢ USG), *Palm Oil in Sumatra and West Africa* (10¢ USG), *Abyssinia** (5¢ USG), *Anglo-Egyptian Sudan** (15¢ USG), *Tunis** (10¢ USG), and *Algeria* (15¢ USG).

ASIA AND OCEANIA

The most valuable book on the grassland and northern forest region of Asia does not indicate its contents by its title, *Turanians and Pan-Turanianism** (7s. 6d. BLI). This 252 page book contains a terse description of the history, ethnology and geography of all the Turanian peoples including the well known Mongols, Kirghiz, Lapps, Hungarians, Turks and many others. This selection on the Mongols demonstrates how well the anonymous author has succeeded in saying much in a few words:

p. 107. They are genuine nomads, living in tents. Only princes, officials, and soldiers on service live in houses. Their dwellings consist of round huts on wooden frameworks covered with felt. In the middle is the hearth, on which only dung is burnt. Opposite the door is the domestic altar. Carpets or felt cloths are used for sleeping and sitting on. The clothes of both sexes are similar and consisted originally of materials derived from

cattle and other animals. But horse-hide and felt garments are being gradually replaced by Chinese jackets and clothes. High caps of sheepskin are everywhere usual. . . . The food of the Mongols is chiefly derived from the products of the cattle they rear. A favorite article is also brick tea prepared with meal, salt, butter and milk. From milk, butter and cheese are made, and kumiss distilled. . . . It is estimated that each family has on the average 50 sheep, 25 horses, 15 horned cattle and 10 camels. . . . The sheep are of the fat-tailed breed. Their cattle are also trained for both carrying and riding. The Mongols engage largely in the transport of goods. It is calculated that 100,000 camels are used for the transport of tea only from Kalgan to Siberia, and that no fewer than 1,200,000 camels and 300,000 oxcarts are employed in the internal caravan trade.

Supplementary to this volume is the material in Handbook 61, *Arabia* (3s. BLI) and *Siberia, its Resources and Possibilities** (15¢ USG), which emphasize the economic rather than ethnographic aspects.

Conditions in monsoon Asia and also the East Indies and Australia are well outlined in *Commercial Travelers' Guide to the Far East** (85¢ USG) and the information it supplies will enable the poverty-striken geographer to travel in the imagination thruout the area and note the characteristics of each city without expense. Good maps and an excellent bibliography are additional virtues of this volume. For additional details it may be supplemented by *China, a Commercial and Industrial Handbook* ($1.75 USG), *Netherlands East Indies and British Malaya* ($1-USG), Philippine *Islands, Commercial Survey** (20¢ USG), *Economic Development of Siam** (10¢ USG), and if historical and physiographical details are wanted the British Peace Handbooks: *French Indo-China* (2s. BLI), *Java and Madura* (2s. 6d. BLI) and other numbers, should be added. Two of the important industries are well described in *Plantation Rubber Industry in the Middle East* (50¢ USG) and *Rice Trade in the Far East** (10¢ USG). The latter gives details of planting, etc. as well as a discussion of the trade.

Australia publishes an *Official Yearbook* (7) which resembles that of South Africa but contains somewhat more descriptive material—including material on the Australian mandates. New Zealand also publishes a *Yearbook,* but the 10¢ pamphlet on *New Zealand, its Resources and Trade** (USG) will suffice for most teachers.

Concluding our survey with India, we find that the British as well as the native states have published a wealth of material in gazetteers, census reports, manuals and reports of commissions. Of this mass of material, I have found the following most helpful: first, for a picture of oriental life before the British came, read

The Burmese Empire by Father Sangeramo, which was written about 1800-19 and reprinted in 1924 (about $1.60 from the High Commissioner for India, London-order thru bookseller).

Next read Volume I of the *Report of the Indian Statutory Commission** (about 90¢ BLI). This is the first part of the famous Simon Report, which was a "best-seller" when it first appeared in London in 1930. Then if you are interested in the industrial conditions of India, read the *Report of the Indian Industrial Commission,* 1916-8 (4s. 6d. BLI). The Indian Nationalist viewpoint is strikingly expressed in a dissenting note beginning on page 245.

Finally there is the *Report of the Royal Commission on Agriculture in India,* 1928 (11s. BLI) which will only appeal to those especially interested in agricultural details, but the *Appendix to the Report,* Vol. XIV* (7s. 6d. BLI) is perhaps the most interesting of the documents listed in this article. It discusses the rural situation of each province of British India and brings out strikingly the great variety of life in India, as is shown by these quotations:

p. 44. Nature is bountiful throughout the deltaic area which is typical Bengal. The cultivator can produce unaided and with a very moderate degree of work sufficient food to support himself and a surplus which will enable him to purchase the few articles not produced at home. If, as is often the case, his sole crop is rice, he has three months' hard work in March, April and May followed by nine months' leisure; if his land is suitable for jute as well as rice, he will have an additional six weeks' work in July and August. He will grow fruit and vegetables and a little tobacco for his own consumption without much trouble round his house and he and his family, especially during the period of rains from July to September, spend a good deal of time fishing.

p. 285. Conditions of life in the Daman are extremely hard. The hill torrents very often bring down either no water or at times too much, causing floods. There is a chronic scarcity of water. Men and cattle move from some villages down to the Indus in hot weather. Those who do not, have to content themselves with one drink a day and the cattle with one every other day. The Daman would be a desert, were it not for the laborious building of dams and embanking of fields.

p. 288-9. (Hills of Northwest Frontier.) Their rocks are hard, the people not less so. The ultimate sanction for such law and order as exists is the rifle in the hands of the individual tribesman. . . .

They have never owed allegiance to any master established either east or west of the Indies. Their independence they have valued more than their lives. At no time have they shown any desire to relinquish it. . . .

Experience has brought home the fact that the basic problem of the tribal tracts is the primeval one, hunger. The mountains breed many, but they feed few. . . . Like mountaineers all the world over, the tribes are forced to supplement their scanty resources either by peaceful means or armed robbery.

It is hoped that enough samples have been given to encourage the readers to investigate further. If all the starred publications are

purchased, the total cost will be about $13, while the complete list will amount to nearly $50. Even the smaller list will provide material for a year or more of spare-time reading, while the complete set (with the aid of a few good texts) provides materials for an advanced course of study.

REFERENCES

(1) USG indicates that the publications can be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. Before remitting it is advisable to write for the free price lists, which give instructions for ordering as well as lists of publications in print. Geographers will find most of the publications of interest to them in the following price lists: 24, Indians; 32, Insular Possessions; 53, Maps; 62, Commerce and Manufactures; 68, Farm Management; 44, Plants; 38, Animal Industry.

(2) * Publications of outstanding value and specially suited to those of limited financial resources are marked with a *

(3) The preceding annuals may often be obtained gratis by writing to your representative in Congress.

(4) For sale by the Dominion Bureau of Statistics, Ottawa. Ask for complete list of publications.

(5) BLI indicates that this is a publication of His Majesty's Stationery Office, London, and may be ordered thru the British Library of Information, 551 Fifth Ave., New York City. Except for publications in stock, four to eight weeks are necessary to obtain British documents. The prices quoted on foreign documents are necessarily approximate as postage charges will often add as much as 25% to the cost.

(6) Purchasable from the Trade Commissioner for the Union of South Africa, 11 Broadway, New York City—$1.55.

(7) 7s.6d. postfree from Government Statistician, Canberra, Australia.

THE NEED FOR AND NATURE OF JOURNEY GEOGRAPHY IN THE FOURTH GRADE*

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When a progressive educator is convinced that a time-honored idea no longer functions, he discards it. The modern teacher of geography in elementary grades discards the idea that children must first enumerate all the continents and all the countries of each continent with the attendant rivers, gulfs, bays, lakes, and cities before they are permitted to discover what an enormous, varied and interesting place this earth is. The old spiral or many-cycle plan of concentrating attention entirely upon memory and omitting altogether, or postponing until an advanced grade, the possibility of rich experiences with abundant opportunities for observation and judgment has passed out from the more progressive systems and seems to be rapidly approaching the exit everywhere.

Another waning idea is that of trying to have children visualize in the beginning a continent "as a whole." A continent is too vast for a beginner to comprehend its significance except part by part. The political unit is often too vast or too varied to make a good teaching unit, and a young child's ideas of political boundaries are too vague to be an asset.

DEMAND FOR VITALIZATION

Within the last few years, teachers, textbook writers and curriculum makers have seen the necessity for replacing the old formal non-functioning parts of the course of study with something more vital, more satisfying to present needs. The problem has been most pressing at about the fourth grade level where imagination and curiosity are very active and where reading ability has reached a degree of independence with regard to simple literature, but where generalizations and abstract statements are quite without meaning. At the same time that we became acutely conscious of our dissatisfaction with our organization of geographic materials, many forces contributed to stimulate our interest in the rest of the world. Some maintain that the World War is largely responsible; surely

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advances in photography, particularly motion picture photography, have played a large part; undoubtedly an era of prosperity and of improvements to the automobile, airplane and other means of travel has helped to make us travel-minded; whatever the cause, travel-minded and curious about the world we Americans now are.

In geography teaching, the results of our dissatisfaction with the old plans and our increased interest in the world about us are shown in our newer courses of study by plans for journey geography, particularly in fourth grade. I have attempted a survey of the recently-published courses of study of each state, and of as many city systems and individual schools as I could obtain. Altho the survey is very incomplete, it is significant that more than half of the courses I have been able to secure, published within the last ten years, make definite provision for journey geography in the fourth grade. Another quarter use, in the fourth grade, such study units that a teacher might adopt the journey idea and use it without altering in any way the stated course.

SELECTION OF JOURNEY UNITS

The term "Journey Geography" implies both a careful selection of units to be studied and a special procedure or technique. We choose for fourth grade journey geography a series of units each of which is as nearly as possible uniform thruout in its geographic features of climate, relief, resources and accessibility; therefore practically uniform thruout in its human responses of acquiring materials for food, clothing, homes and other needs, uniform in the means of communication, in the work and play of its people. Such a unit in later years of geographic study is called a geographic region. But the fourth grade child does not need to make a thoro study of the whole region. Its area, population, varied tribes or races, entire list of cities or outstanding physical features are not his present need. Instead, we hope to help him build up a definite concept of what life is like in a distant place where the environment is different from our own in at least one important factor. As an aid to definiteness and concreteness, we center the child's attention upon a small part of the selected region, usually upon the homes of a typical family and their neighbors (a social unit), and the appearance and utilization of the land and waters one would actually cross to reach the selected home. In his pursuit of journey geography, the child is making a type-study in a two-fold sense;

first, the places which he sees, the persons whom he meets are representative or typical of all or most of the places and persons within the chosen region; second, the whole region is typical or representative of a group of generally similar regions elsewhere.

JOURNEY GEOGRAPHY TECHNIQUES

The parts of the world where life is still primitive offer the best choices for our journey studies, in my opinion. Of course, two schools of thought have had many exponents: one, working out from the home vicinity to the home state, the nation, the rest of the continent, and on thru the other continents; the other, vivid contrasts immediately after the home study, or even on a small scale hand in hand with the home study. Having tried them both, and having seen the interest and vigor with which the children set about studying the lands which are different from our own, my preference is strong in favor of the distant, different lands. When children learn about a land where life is very different from our own, it seems inevitable that their concept of the earth's size must grow rapidly; each strikingly different environment must help the growing process. These sharply contrasting parts of the world where life is still primitive offer the most interesting evidences of the relationship between the earth on the one hand and man with his needs and activities on the other. And a realization of this relationship is the beginning of our knowledge of geography.

The most primitive environments are the hot, wet lands of the Congo, the Amazon and elsewhere, the desert lands such as Mesopotamia, Arabia and the Sahara, and the Polar Lands. Even into these places world influences are bringing changes, but these are still places where most of man's needs are met within the area immediately accessible to him. Logically, first choice of journey studies lies within this group, to be followed in any desired order by environments which differ from ours in less degree, but at least in one striking essential, or which resemble our own in some conspicuous way: the mountain environment, the temperate lowland, the rocky coasts with such scant soil that the livelihood is chiefly from the sea, the lands of seasonal rain and drought. Many prefer to add lands with a different cultural appeal, altho their only outstandingly different geographic factor is the inaccessibility during bygone days.

Certain circumstances may make a different order desirable on

psychological grounds, especially actual recent travels of the teacher or of a member of the class, or current explorations of world-wide interest.

All of the best possibilities of journey study *units* are alike in these four ways: they help to establish clearly man's dependence upon his environment, and so call the child's attention forcefully to the factors of the environment; they offer vivid contrasts or comparisons; each has prototypes elsewhere in the world which will demand frequent recall and applications of the child's journey experiences. Thus each will remain a center of interest thruout the succeeding study of geography.

But type study is an adult expression; we use it in textbooks and in meetings like this. To the child it conveys nothing. What he is really doing is studying his own experiences. The teacher must have enough enthusiasm for adventure to be taken out of the classroom in spirit, and enough magnetism to take the children with her to different lands; otherwise journey geography is just another phrase. The child gets his thrill because for the period of study and discussion, he is away with the Eskimo or the Arab or the fisherman. Added to the spirit of adventure, another opportunity for real contact is the child's interest in other children, which has led some teachers and writers to introduce a real boy or girl as a central figure in each type region, thus providing a human type whose daily dangers, joys and activities provide the vehicle which carries our American children into far corners of the earth.

COMMON ELEMENTS IN JOURNEY TECHNIQUES

Journey geography as I am describing it appears to be a procedure or a technique grafted on to the type study idea. The procedures or techniques vary according to the teacher's individuality and the needs of the class; but all the desirable techniques undoubtedly have these ten elements in common: first, the children study the unit *not* as a place that is *somewhere,* remote, impossible to be reached—just another fairy tale setting; instead, they think of it as a place to which many Americans have traveled, others are at least occasionally going, and where we could go also if we could command the time and money. Second, they consider the elements of time and cost, of previous preparation of clothing and other supplies, of the season of the year most favorable to the journey. Third, they go by an established route, not by a magic carpet or

by riding on a moonbeam. The magic carpet and moonbeam ideas make delightful supplementary reading, as they are intended to do, but the teacher who adopts them as regular means of transportation is missing a real life opportunity. Children often say, "When I go there, I shall go in an airplane," because they long for that experience, and because they know its speed. But they need also to know whether there is a commercial route available, if so, what it would cost, or whether the journey would be feasible to the owner of a plane.

The fourth element which should characterize journey geography procedure is that the start is from home. The textbook cannot be adapted to each individual home town, but the teacher must lead the journey to the nearest large railroad center or port. She must not say as I heard a teacher say, "Well, on our journey to Polar Lands, we must pretend we live in Montreal, because the book says we can take a steamer at Montreal." Neither must the teacher think she is using journey geography if she uses this procedure which I have seen in print: "To-day, children, we will jump into our airplane and spend the day in Switzerland." She then shows slides of Switzerland for half an hour; finally showing a picture of a sunset, and remarking: "The sun is setting and we must climb back into the plane and hurry home to our own beds, but tomorrow we will come again and spend another day in Switzerland." Impressions of Swiss life do not constitute a complete geography lesson unless they include the idea of where the place is in relation to us.

Fifth, the children know how they would live enroute, if they were actually making the trip. In our city, few children know by actual experience what travel accommodations by train or ship really are. I have made a survey of the travel experiences of the children in our school and in our whole city from grades four to seven inclusive, and I have found that while 94 per cent of the fourth grade children have driven by automobile at least to the next city, only 51 per cent have ever ridden in a train, 21 per cent in a sleeper, 18 per cent in a steamship, and very few children in the city have ever spent a night aboard ship. They need to have the teacher go into detail about experiences of travel. And by the way may I add that the figures for the seventh grade are no higher, which seems to me to indicate that nothing can be gained by postponing journey geography and that much should be gained thruout the whole elementary school by enriching the child's travel experiences.

Sixth, children should know in what general direction they are traveling, what ocean they cross, what continent they reach, and the names of the villages, cities, and waterways they actually visit. They need not concern themselves with other place names.

Seventh, children should learn to interpret a map and to refer to it for information, but they do not begin with a complete map of the world, with its full quota of parallels, meridians and place names. There are no symbols on their early maps except the ones they need for the business in hand. The maps grow in respect to the number of symbols as the child increases in ability to interpret.

Eighth, the child studies all available pictures of the area visited, makes his own comments and observations, is encouraged to ask questions, to make judgments for himself and to verify them by reading an authority.

Ninth, the children must learn by the inductive method—from the particular to the general—instead of learning a bewildering array of definitions and generalities. Perhaps the most outstanding example of this is in the matter of zones and climate. The old-school idea was to teach a child at the outset, perhaps on his first day of geography study, that the earth is divided into five zones, one always hot, etc., and probably he was encouraged to draw a diagram no larger than a teacup and name the zones. Whenever he needed to find out what kind of climate any place had, the answer was found quickly and without further thought or question by discovering which zone it lay in. In journey geography, the idea of experience before terminology is utilized, the child has a more scientific and more interesting, more *real* presentation; he learns that in low latitude lands the sun is quite high in the sky each noon of the year, and some days it is actually overhead; that we use two lines on the map to show just where the places are that ever have the sun overhead; he finds out by his own experiences at home that hot weather comes when the sun is almost overhead. He should discover, too, that the very hot climate of equatorial lands depends upon daily and hourly high temperatures like our hot summer days, rather than upon temperatures higher than we have ever experienced. Gradually he develops an adequate concept of the relation between the earth and the sun and an adequate idea of climates different from our own. He will not, of course, accomplish all this in the fourth grade, but at least he is not taught any untruths that have to be untaught in later grades.

Tenth, journey geography is largely a series of vicarious experiences, but every attempt is made to have them as real and vivid as possible. Pictures taken by actual travelers are studied and preserved, actual travel experiences are told or read; returned travelers are invited to relate their adventures; souvenirs are exhibited. Supplementary books and parallel texts are searched for items of interest. The children dramatize their experiences, perhaps decorate their room with a frieze of scenes, or make a puppet show or a movie show for visiting grades or mothers.

One outstanding feature of journey geography for the fourth grade is the choice of so small a number of units of study that there is plenty of time for detail, discussion and repetition with variety and interest.

A popular writer of fiction recently wrote about one of her characters: "The difference between Jane and the rest of you is this: Jane has discovered that she lives in a world instead of a village." Journey geography helps children to make this interesting discovery for themselves.

EDITORIAL NOTES AND NEWS

Underground water is one of the greatest resources of Texas. It furnishes about 80 per cent of the people with drinking water, irrigates thousands of acres, and waters most of the stock. So significant is this water supply that a federal and state survey was initiated in 1929. The Department of Interior will furnish a preliminary report in manuscript form on the work thus far completed. This survey is intended to give the public general information on the distribution of water, its depth, its yield, its suitability for various uses, its permanency or liability to change, and the most desirable type of well to use.

How would you address a letter to a firm in Singapore? A recent Geographic Bulletin from the U. S. Department of Commerce gives Straits Settlements only, abbreviated S.S., as the proper address. Singapore is not in the Federated Malay States, but is a part of British Malaya, a term popularly designating the Federated and Non-Federated Malay States, the Straits Settlements, and in the British Bornean possessions.

Also the preferred official name of Russia is now the Union of Soviet Socialist Republics (U.S.S.R.). Soviet Union is the term in general use.

Similarly, a letter should never be addressed to Hong Kong, China, but just to Hong Kong; or Hong Kong, Asia; or Hong Kong, British Colony; or Hong Kong, Hong Kong.

Thousands of acres of crop land have been reclaimed in Utah as a result of eradicating prairie dogs.

According to information from the Transportation Division of the Bureau of Foreign and Domestic Commerce, vessels of 18 feet draft will be permitted to use the new Welland Canal this season. When the dredging work is completed the navigable depth will be 25 feet.

One day last September, 22 inches of rain fell in 24 hours at Bombay. The following day a "mere shower" of seven and a half inches fell.

Tung oil importations into the United States from China are assuming such large values (about 11 million dollars in 1928, exceeded only by raw silk) that it may be interesting to make a few notations regarding its production. According to F. A. McClure, in the *Lingnan Science Journal*, Lingnan University, Canton, China, the most important producing area is in west central China. The crop is usually planted on mountain slopes in a rotation following corn and soya bean culture. The trees may bear at three years of age, and usually continue bearing for 20 years. The trees when mature are about six inches in diameter and 12 feet high. The oil is obtained from the pressing of the seeds taken from the nuts. A nut contains three or more seeds. The oil is used chiefly in the making of paints and varnishes, in the treatment of linoleum, and the waterproofing of paper, cloth, and wood.

About twenty years ago the culture of the tree started in this country. Now it centers at Gainesville, Fla. To thrive, the tree needs at least 28 inches of rainfall, little wind when young, a rich soil, and a temperature minimum of 18° or 20°F.

Land Utilization and the Farm Problem, Miscellaneous Publication 97-MP, is the title of a recent publication issued by the U. S. Department of Agriculture that will be of great interest to all students and teachers of economic geography. This is a careful analysis of the utilization of land and its bearing on the present agricultural situation. The analysis and report was prepared by Drs. Gray and Baker. The authors summarize the situation in part as follows:

"Overproduction has been brought about through a number of conditions. One of the most important is expansion of the farming area. This was general in nearly all parts of the United States in the decade 1909 to 1919. In relation to population growth, expansion was not excessive as compared with the rate of expansion in the preceding decade. This is even more true if we consider the entire period from 1919 to the present, for there has been little net increase in crop area from 1919 to the present. The expansion in the period since 1909, however, has been unduly great in view of the growth of the agricultural area in other parts of the world, of increasing production per acre, and of changed conditions of demand.

"Important changes in consumption in the United States have notably modified land requirements through the extensive elimination of horses and mules, decreased per capita consumption of bread grains and of beef, and greater use of certain tropical products, such as sugar and vegetable oils, which have displaced in a measure the consumption of products of the temperate zones. The distress of agriculture in important areas has also been promoted by the spread of standards of living, which require actual cash, causing thousands of farmers to become dissatisfied with isolation and dependence on home-produced necessities. An extensive regrouping of farm population is taking place with reference to obtaining locations where more money income can be obtained and where the family can enjoy the advantages of good roads and other modern facilities."

INTEREST-STIMULATING DEVICES

Device For Teaching Directions

From the first the children should be taught to find north from the sun at noonday.

Just before noon on a sunshiny day the children should be taken to the school yard. Have one child stand with his back to the sun. The shadow cast by his body will point north. Another child should mark the shadow on the ground. (Pegs should be placed at intervals along the line to preserve it.) This line is the noon shadow line or meridian. Have the line extended on the ground for some distance. Tell the children that that line extending far north and far south passes through many interesting places where many people are living and that their noon comes at the same time ours does.

From this line south is taught as opposite north with east on the right and west on the left hand side.

Encourage the children to locate north from different places, always a few minutes before noon on a sunshiny day: (1) in their own yard; (2) at a friend's or relative's house; (3) in another town or city; (4) lead the pupils to watch the sun during the day. When is it in the eastern sky? When in the western sky?

Place a shadow stick in the school yard. Have a peg placed at the end of the shadow cast by this stick in the morning, at midday, in the middle of the afternoon. Different groups of children may be appointed to do this at different times during the day and at intervals throughout the year. They like the responsibility.

The following observations may be made:

Notice shadows cast by trees and telegraph poles at different times.

Notice moss growing on the north side of trees.

Ice and snow clinging to the north sides of trees and posts in winter.

Have some one at home help the children to locate the north star at night.

The work on directions takes time and should be repeated many times during the school year. It is time well spent if it keeps the children from having that "all turned round feeling" when going to a new place.

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General Review Device

The following plan has been used with success in our seventh grade for a general review.

Each day numbered slips with questions were passed to the members of the class. A period of study proportionate to the difficulty of the questions followed. During this period of study textbooks, reference books, pictures, wall maps, etc. all were put into use.

Then the teacher called for the answers by number. Those students who answered their questions correctly were permitted to keep their slips. If any student failed to answer his question correctly, the slip went to the volunteer who could make the right response.

At the end of a week a prize was awarded to the pupil who had earned the greatest number of slips.

PHYLLIS BRIDGE

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Location Drill

Children like to play this game in geography. The teacher or members of the class direct the game as follows. Before the game starts, make sure the children's fingers are clean. It is advisable to furnish them with inexpensive maps outside their texts.

1. Tell children to turn to a map of the United States.
2. Have each pupil who is to play the game put a finger of the right hand on the city of Baltimore, or on their home city.
3. Place a finger of the left hand next to the right one, on the same parallel.
4. Then with eyes closed, let the pupil move the finger of the left hand to St. Louis. As he opens his eyes, the pupil either checks his own accuracy or another pupil may do so.
5. The child then moves his left finger back into position noted in (3) above and continues to locate a number of other places. Make the drill rapid, using the place names of rivers, lakes, mountains, oceans, regions, etc.

In order that the game shall not be a mere abstract memorization of locations, have the children cite some significant human activity related to some of the natural features of each site located on the map.

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NOTICE

Please send your devices to the Editor. We will be pleased to publish more plans that have been found to be helpful. Do not hesitate to send in your devices on the assumption that other people have already sent in theirs, and that yours will be of no value. These devices are proving of great interest to many teachers, and we would like to have a large number on file. Please write your directions so that they are sufficiently definite for another teacher to follow accurately.